

## AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of the claims in this application:

1. - 48. (Cancelled)

49. (Currently Amended) An implantable orthopaedic prosthesis, comprising:

a laminar composite bearing having (i) a radiation crosslinked layer of polyethylene having an articulating surface defined in a first side thereof; and (ii) a non-crosslinked layer of polyethylene molded to a second, opposite side of said crosslinked layer of polyethylene at a melt-fused interface, wherein non-crosslinked polyethylene of the non-crosslinked layer of polyethylene is fused to crosslinked polyethylene of the crosslinked layer of polyethylene at the melt-fused interface ~~said first side of said crosslinked layer of polyethylene is crosslinked to the same degree as the second side of said crosslinked layer of polyethylene.~~

50. (Previously Presented) The implantable orthopaedic prosthesis of claim 49, wherein said radiation crosslinked layer of polyethylene and said non-crosslinked layer of polyethylene are compression molded to one another.

51. Cancelled.

52. (Previously Presented) The implantable orthopaedic prosthesis of claim 49, wherein:

said non-crosslinked layer of polyethylene has an engaging surface defined therein which is adapted to be secured to an acetabulum of a patient.

53. (Withdrawn) The implantable bearing of claim 49, wherein:  
said crosslinked layer of polymer has an articulating surface defined therein, and  
said non-crosslinked layer of polymer has an engaging surface defined therein  
which is adapted to be secured to a glenoid of a patient.

54. (Withdrawn) The implantable bearing of claim 49, wherein:  
said crosslinked layer of polymer has an articulating surface defined therein, and  
said non-crosslinked layer of polymer has an engaging surface defined therein  
which is adapted to be secured to a tibia of a patient.

55. - 124. (Cancelled)

125. (Currently Amended) An implantable orthopaedic prosthesis, comprising:  
a laminar composite bearing having (i) a first layer of polyethylene having an  
articulating surface defined in a first side thereof; and (ii) a second layer of polyethylene molded  
to a second, opposite side of said first layer of polyethylene at a melt-fused interface, wherein (a)  
said first layer of polyethylene is radiation crosslinked to a first degree ~~from said first side  
thereof to said second side thereof~~, and (b) said second layer of polyethylene is radiation  
crosslinked to a second degree that is different than said first degree, and (c) polyethylene  
crosslinked to the second degree of the second layer of polyethylene is fused to polyethylene  
crosslinked to the first degree of the first layer of polyethylene at the melt-fused interface.

126. (Previously Presented) The implantable orthopaedic prosthesis of claim  
125, wherein said second degree is less than said first degree.

127. Cancelled.

128. (Previously Presented) The implantable orthopaedic prosthesis of claim 125, wherein said first layer of polyethylene and said second layer of polyethylene are compression molded to one another.

129. (Previously Presented) The implantable orthopaedic prosthesis of claim 125, wherein:

said second layer of polyethylene has an engaging surface defined therein which is adapted to be secured to an acetabulum of a patient.

130. (Withdrawn) The implantable bearing of claim 125, wherein:

said first layer of polyethylene has an articulating surface defined therein, and

said second layer of polyethylene has an engaging surface defined therein which is adapted to be secured to a glenoid of a patient.

131. (Withdrawn) The implantable bearing of claim 125, wherein:

said first layer of polyethylene has an articulating surface defined therein, and

said second layer of polyethylene has an engaging surface defined therein which is adapted to be implanted into a tibia of a patient.

132. Cancelled.